

**ASHLOCKOBIUS, A NEW GENUS OF MYODOCHINI FROM VENEZUELA
(HEMIPTERA: LYGAEOIDEA: RHYPAROCHROMIDAE: MYODOCHINI)**

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Abstract.—*Ashlockobius cursorius*, new genus and species of myodochine lygaeoid is described from Venezuela. The genus is related cladistically to *Orthaea* Dallas, *Catenes* Distant, *Heraeus* Stål and *Myodocha* Latreille. It is believed to be an ant mimic. Figures are given of the details of the inflated phallus and of the claspers. A color figure of the habitus is included.

Key Words: Hemiptera, Lygaeoidea, Rhyparochromidae, Myodochini. Venezuela, *Ashlockobius cursorius*, mimicry

The Myodochini constitute one of the dominant elements in the lygaeoid fauna of the Neotropics. It is abundant and diverse not only in the number and variety of taxa present but in the abundance of many individuals of some species. Ant mimicry occurs frequently. The new genus described below is apparently an ant mimic although its biology is unknown.

Henry (1997) has elevated the former subfamily Rhyparochrominae of the family Lygaeidae to family status with two subfamilies, the Plinthisinae and the Rhyparochrominae with the former tribes of the latter retained as tribes. We have adopted Henry's conclusions here, but suggest that the tribes within his new definition of the subfamily may ultimately prove to merit family status cladistically. Henry's statement that the subfamily Rhyparochrominae as redefined consists of taxa with an incomplete suture between abdominal sterna four and five and with carinate pronotal margins is an oversimplification. Genera that occur in at least five tribes within the Rhyparochrominae have the abdominal sternal suture complete. Rounded, ecarinate pronota

occur in several tribes and is one of the diagnostic features of the Myodochini.

All measurements are in millimeters.

***Ashlockobius* Slater and Slater,
new genus**

Description.—Body elongate, slender, nearly parallel sided. Dorsal surface of body subshining. Legs and antennae both extremely elongate. Head moderately declivent anteriorly; eyes set a short distance away from anterior pronotal angles. Antenniferous tubercles divergent. Head below broadly transversely striate from level of distal ends of antenniferous tubercles to level of posterior margins of eyes. Bucculae V-shaped. Vertex convex between eyes with patches of pruinosity present.

Anterior pronotal lobe extremely elongate and elliptically convex, with a pruinose median stripe on anterior pronotal lobe and large irregular pruinose patches laterally on posterior half of anterior lobe. Posterior pronotal lobe dull with a patch of white pruinosity near transverse impression on either side of midline. Pronotum with only scattered, relatively inconspicuous, punc-

tures present; anterior collar complete, coarsely punctate, delimited posteriorly by a sharp deeply impressed line, not produced posteriorly at meson; transverse pronotal impression deep and complete; posterior pronotal lobe with prominent punctures.

Scutellum with a conspicuous Y-shaped, elevated carina; pruinose, bicolored with a large triangular basal grayish-white patch and a spot on each side near divergence of elevated Y-carina, remainder of scutellum reddish brown. Clavus, corium and membrane contrastingly strongly shining former with 3 complete rows of punctures and a partial fourth row on distal half between inner and median rows. Corium moderately expanded posteriorly; outer margin irregular and beaded, lacking a stridulitrum. Apical corial margin adjacent to membrane lacking a series of punctures. Mesepimeron not emergent. Metathoracic scent gland auricle short, straight, tapering distally; evaporative area large, covering inner two thirds to three fourths of metapleuron, and extending narrowly along posterior margin of mesopleuron.

Fore coxa with a prominent spine and a smaller secondary spine present. Fore femur elongate and slender, almost entire ventral surface of each femur heavily spinous, with rows of large spines along inner and outer edges and numerous small spines between. Each fore tibia with a widely spaced series of 4 short sharp spines on inner face. Shaft of tibia not strongly curved.

Lateral and ventral surfaces completely dull and chiefly pruinose except for a large quadrate shining patch mesally on mesosternum, this latter with a narrow median groove. Antenna very elongate, slender, tere with fourth segment fusiform. Posterior margin of abdominal sternum 2 not finely scalloped.

Posterior margin of pygophore broadly rounded, without a median impression. Clasper (Fig. 3) with a distinct thumb-like exterior projection, interior margin with a pronounced flange narrowing distally but extending almost to apex. Phallus (Figs. 2,

4) without sclerotized conjunctival or vesical spines; conjunctiva short, bearing low lateral subapical lobes; vesica short; helioid process present; a large lobe bearing many projections on each side of ejaculatory reservoir. Ejaculatory reservoir with well developed wings (Fig. 2), holding sclerites short, narrowing distally.

Type species.—*Ashlockobius cursorius*, new species. Monotypic.

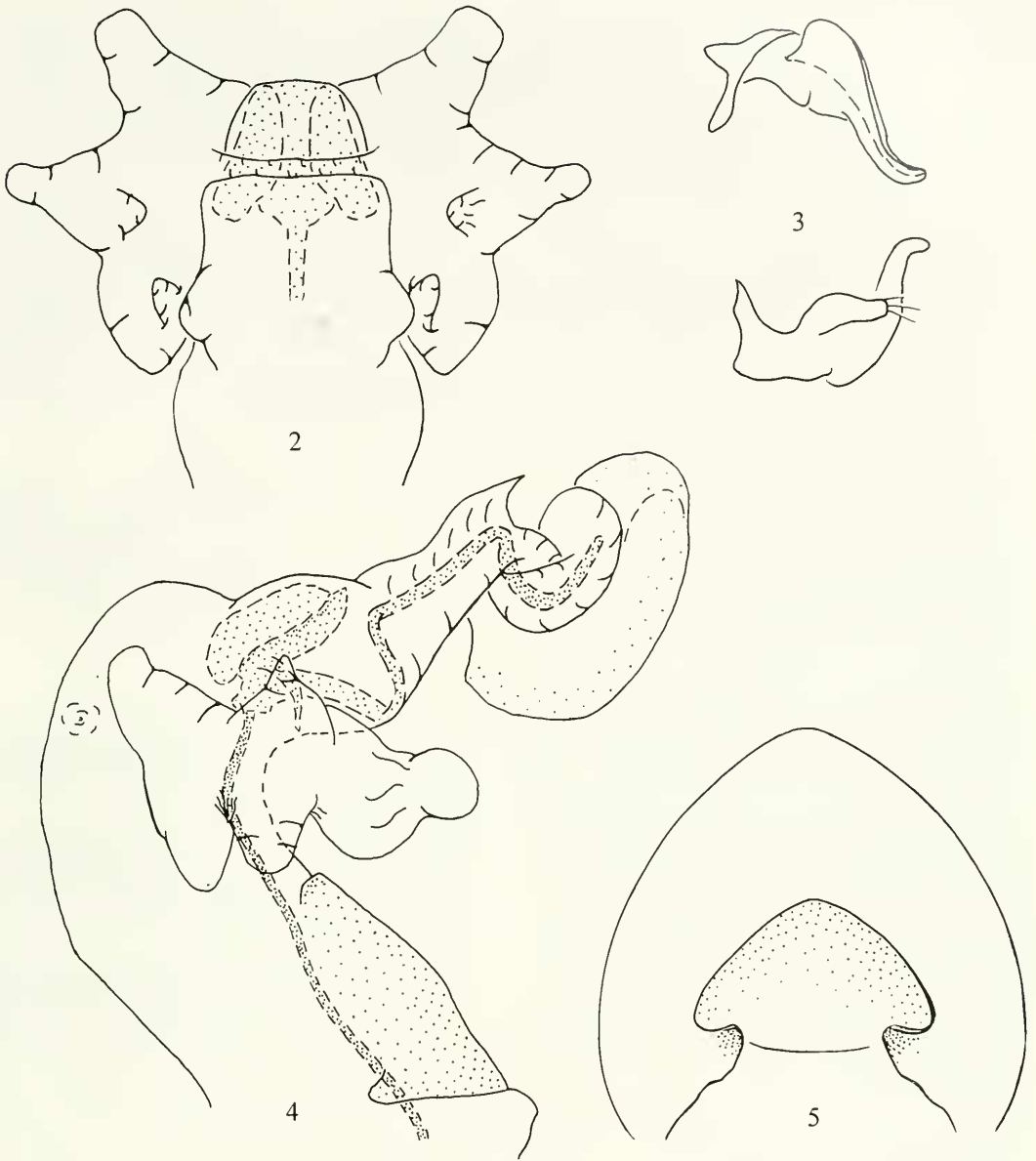
Discussion.—*Ashlockobius* keys without difficulty to couplet 51 in Harrington's (1980) key to myodochine genera. It differs from *Togo* Bergroth (from Japan) in having a relatively much longer anterior pronotal lobe, more than one and one-half times the length of the posterior lobe in *Ashlockobius*; in *Togo* the anterior lobe is at most only slightly longer than the posterior lobe. *Ashlockobius* also does not have strongly curved anterior tibiae. Most specimens of *Togo* are brachypterous, the male fore tibiae are prominently curved, and the members of the genus are relatively stout and robust.

Ashlockobius differs from those genera reached through couplet 52 of Harrington by having the combination of armed male fore tibiae, as described above, and an anterior pronotal lobe at least 1.5 times as long as the posterior lobe.

The absence of vesical or conjunctival spines and the robustly winged ejaculatory reservoir with short holding sclerites places *Ashlockobius* in the group of genera with Harrington's Type IV phallus. This placement is supported by the broadly rounded posterior margin of the pygophore (Fig. 5). Within this group the presence of pruinose areas on the dorsum and the somewhat elongate head and rounded vertex place the genus with a group on Harrington's cladogram consisting of *Orthaea* Dallas, *Catenes* Distant, *Heraeus* Stål, and *Myodocha* Latreille. Analysis of other phallic characters must await study of the inflated phallus of more species. The illustration of an inflated *Myodocha* phallus provided by Ashlock (1957), which exhibits an elongate conjunctiva with several lobes and an apparently



Fig. 1. *Ashlockobius cursorius*, Dorsal view.



Figs. 2-5. *Ashlockobius cursorius*. 2, Ejaculatory reservoir, dorsal view. 3, Claspers, outer and inner views. 4, Aedeagus, lateral view. 5, Genital capsule, dorsal view.

asymmetric set of vesical lobes, indicates that such studies will prove to be fruitful.

Etymology.—It gives us great pleasure to be able to dedicate this striking new genus to the memory of Dr. Peter D. Ashlock for his many contributions to the systematics of the Lygaeoidea.

***Ashlockobius cursorius* Slater and Slater, new species**
(Figs. 1-5)

Description.—*Male*: Body very elongate, slender, attenuated, with extremely elongate appendages. Color bright reddish brown almost throughout, including ap-

pendages. Antenna with distal ends of segments II and III infuscated with chocolate brown. Corium marked with chocolate brown as follows: a small spot along lateral corial margin at level of distal third of apical corial margin, a small apical spot, an elongate dash along radial vein running from level of distal fifth of claval commissure nearly to anterior end of apical corial margin, a stripe at inner angle of corium that extends from inner margin at apical third of claval commissure to adjacent row of punctures then narrowly along apical corial margin to a level slightly posterior to lateral corial spot. Anterior collar and posterior pronotal lobe yellow, contrasting with red-brown anterior lobe. Corium light yellow brown except as noted above.

Eyes large, protrudant but not stalked, head strongly narrowing behind eyes but without a distinct stalked neck. Length head 1.34, width 1.20, interocular space 0.62. Length pronotum 2.60, length anterior pronotal lobe (less anterior collar) 1.60, width 1.84. Length scutellum 1.24, width 0.96. Length claval commissure 0.84. Midline distance apex clavus-apex corium 1.76. Midline distance apex corium-apex abdomen 1.72. Length labial segments I 0.76, II 0.84, III 0.52, IV 0.44. Labium reaching posterior third of prosternum but remote from fore coxae. Length antennal segments I 1.88, II 3.48, III 2.80, IV 1.72. Total body length 9.80.

Holotype.—♂. VENEZUELA: Aragua, 16 km S. Telerias, May 10, 1978 (C.W. & L.B. O'Brien and Marshall). In American Museum of Natural History, New York.

Etymology.—The name is from the Latin word for a runner.

Discussion.—The male specimen upon which the preceding description is based was collected in Venezuela twenty years ago. It is a striking, elongate, long-legged myodochine, which we have held for many years in the hope that additional specimens would become available. Unfortunately this has not happened.

ACKNOWLEDGMENTS

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LITERATURE CITED

- Ashlock, P. D. 1957. An Investigation of the Taxonomic value of the Phallus in the Lygaeidae (Hemiptera-Heteroptera). *Annals of the Entomological Society of America* 50: 407-426.
- Harrington, B. J. 1980. A generic level revision and cladistic analysis of the Myodochini of the World (Hemiptera, Lygaeidae, Rhyparochrominae). *Bulletin of the American Museum of Natural History* 167: 49-116.
- Henry, T. J. 1997. Phylogenetic Analysis of Family Groups within the Infraorder Pentatomomorpha (Hemiptera: Heteroptera), with Emphasis on the Lygaeoidea. *Annals of the Entomological Society of America* 90: 275-301.